June 26, 2002

MEMORANDUM

TO: Bill Rogers
Title V Permit Coordinator

FROM: Darrin Mehr, Associate Air Quality Engineer
State Office of Technical Services

SUBJECT: ***TECHNICAL MEMORANDUM FOR TIER I OPERATING PERMIT***
AIRS Facility No. 031-00026, Sinclair Oil Corp., Burley Terminal; Burley
Final Tier I Operating Permit

Permittee:	Sinclair Oil Corporation
Permit Number:	031-00026
Air Quality Control Region:	63
AIRS Facility Classification:	A
Standard Industrial Classification:	5171
Zone:	12
UTM Coordinates:	277.1, 4710.3
Facility Mailing Address:	425 E. Highway 81, Burley, Idaho 83318
County:	Cassia
Facility Contact Name and Title:	Dave Cole, Terminal Manager
Contact Name Phone Number:	Permitting Contact: Sam Greene, P.E., Corporate Air Quality Engineer, (801) 524-2700
Responsible Official Name and Title:	Mark Petersen, Pipelines and Terminals Manager
Exact Plant Location:	Range/Township Coordinates: T-10, S-36, R23E
General Nature of Business & Kinds of Products:	Petroleum Products Storage and Bulk Distribution--Gasoline and Diesel Fuel Products

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Acronyms, Units and Chemical Nomenclature

ACFM	Actual Cubic Feet Per Minute
AFS	AIRS Facility Subsystem
AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
CFR	Code of Federal Regulations
CO	Carbon Monoxide
DEQ	Idaho Department of Environmental Quality
dscf	Dry Standard Cubic Feet
EF	Emission Factor
EPA	United States Environmental Protection Agency
gpm	Gallons Per Minute
gr	Grain (1 lb = 7,000 grains)
HAPs	Hazardous Air Pollutants
IC	Integrated Chip
IDAPA	Idaho Administrative Procedures Act
km	Kilometer
lb/hr	Pound Per Hour
MACT	Maximum Available Control Technology
MMBtu	Million British thermal units
NESHAP	Nation Emission Standards for Hazardous Air Pollutants
NO_2	Nitrogen Dioxide
NO_X	Nitrogen Oxides
NSPS	New Source Performance Standards
O_3	Ozone
PM	Particulate Matter
PM_{10}	Particulate Matter with an Aerodynamic Diameter of 10 Micrometers or Less
ppm	Parts Per Million
PSD	Prevention of Significant Deterioration
psia	Pounds per square inch absolute
PTC	Permit To Construct
PTE	Potential To Emit
SCC	Source Classification Code
scf	Standard Cubic Feet
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TSP	Total Suspended Particulates
T/yr	Tons Per Year
µm	Micrometers
VOC	Volatile Organic Compound

FINAL PERMIT

SUMMARY

A 30-day public comment period for the Sinclair Oil Corp., Burley, Idaho facility's proposed Tier I operating permit was held from February 16, 2000, until March 17, 2000, in accordance with IDAPA 58.01.01.364 (*Rules for the Control of Air Pollution in Idaho*).

IDAPA 58.01.01.008.01, defines *affected states* as: *"All states: whose air quality may be affected by the emissions of the Tier I source and that are contiguous to Idaho; or that are within 50 miles of the Tier I source."*

A review of the site location information included in the permit application indicates that the facility is located with 50 miles of a state border. Therefore, the states of Utah and Nevada were provided an opportunity to comment on the draft Tier I operating permit.

Summary of Comments

No comments were received from any affected state.

Comments were received from EPA Region 10 on March 13, 2000, and the Sinclair Oil Corporation (Sinclair) on March 16, 2000. A copy of the comments received is included in Appendix A of this memorandum.

A hearing was not requested.

Responses to comments are provided in Appendix B of this memorandum.

EPA 45-Day Review

After the public comment period and/or public hearing, EPA was sent the proposed operating permit and the technical analysis memorandum for their 45-day review period. EPA did not provide any comments on the permit.

1. PURPOSE

The purpose of this memorandum is to set out the legal and factual basis for this proposed Tier I operating permit in accordance with IDAPA 58.01.01.362, *Rules for the Control of Air Pollution in Idaho (Rules).*

The Idaho Department of Environmental Quality (the Department) staff has reviewed the information provided by Sinclair Oil Corporation (Sinclair) regarding the operation of the Sinclair Bulk Gasoline and Distribution facility located near Burley, Idaho. This information was submitted based on the requirements to submit a Tier I operating permit in accordance with IDAPA 58.01.01.300 of the *Rules.*

2. SUMMARY OF EVENTS

On June 26, 1995, the Department received the Tier I operating permit application from Sinclair for their Petroleum Products and Distribution facility near Burley, Idaho.

On August 12, 1995, the Department requested additional information in support of the Tier I operating permit application.

On August 25, 1995, the Department declared the Tier I operating permit application incomplete, and requested the submittal of additional information.

On September 12, 1995, the Department received additional information for the Tier I application.

On November 17, 1995, the Department declared the Tier I operating permit application administratively complete.

The administratively complete Tier I operating permit application remained on file during the development and issuance of a facility-wide Tier II operating permit. The Tier II operating permit was issued on August 23, 1996 to establish synthetic minor (or "area source") status for HAP emissions. The Tier II operating permit exempted the facility from MACT requirements that are applicable to major sources within this particular industrial grouping.

On September 8, 1998, the Department received a Tier I operating permit application update from Sinclair.

On October 30, 1998, the Tier I operating permit application was declared "technically" complete.

A 30-day public comment period for the Sinclair Burley, Idaho, Petroleum Products Storage and Distribution facility draft Tier I operating permit was held from February 16, 2000 to March 17, 2000, in accordance with IDAPA 58.01.01.364 of the Rules. No comments were received from any affected state.

Comments were received from EPA Region 10 on March 13, 2000, and Sinclair on March 16, 2000.

A hearing was not requested.

On May 8, 2002, the Tier I operating permit was sent to EPA Region 10. The permit and memorandum included responses to public comments.

On June 21, 2002, EPA Region 10's 45-day review period ended. No comments were submitted by EPA.

3. BASIS OF THE ANALYSIS

The following documents were relied upon in preparing this memorandum and the Tier I operating permit:

(1) Tier I Air Permit Application, dated June 23, 1995, and received June 26, 1995, Sinclair Oil Corporation.

(2) Tier I Air Permit Application Resubmittal, dated June September 18, 1995, and received September 19, 1995, Sinclair Oil Corporation.

(3) US EPA TANKS2, Storage Tank Emissions Calculation Software, Version 2.0, Emissions Inventory Branch, Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, September 23, 1983.

(4) US EPA Protocol for Equipment Leak Emission Estimates, Document # EPA-453/R-95 017.

(5) Tier II operating permit issued on August 23, 1996, and the Department supporting Technical Memorandum.

(6) Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, January 1995, Office of Air Quality Planning and Standards, United States Environmental Protection Agency.

(7) Tier I Operating Permit Application Revisions, dated September 1, 1998, and received September 8, 1998 (Samuel B. Greene, P.E., to Susan J. Richards).

(8) Tier II operating permit Technical Memorandum, dated February 16, 1996 (Darrin Mehr and Wade Woolery to Brian Monson), Titled "Technical Analysis for Proposed Tier II Operating Permit (No.001-00112) sic, Sinclair Oil Corporation (Burley)" Note: mistakenly numbered should have been No.031-00026.

(9) Issuance of Tier II operating permit Technical Memorandum, dated August 23, 1996 (Darrin Mehr and Wade Woolery to Brian Monson), Titled "Supplemental Technical Analysis for Proposed Tier II Operating Permit (No. 031-00026), Sinclair Oil Corporation (Burley)."

(10) New Equipment Leak Emission Factors for Petroleum Refineries, Gasoline Marketing, and Oil & Gas Production Operations, U.S. EPA, February 1995.

(11) Guidance developed by EPA and the Department.

(12) Title V permits issued by other jurisdictions.

(13) Documents and procedures developed in the Title V Pilot Operating Permit Program.

4. FACILITY DESCRIPTION

4.1 General Process Description

The facility receives petroleum products through the Chevron supply pipeline originating in Salt Lake City, Utah. Petroleum products consisting of various grades of gasoline and distillate fuel oil are temporarily stored in tanks prior to transfer to mobile carrier tanks for transport and delivery off-site.

The petroleum products are stored in any of seven existing storage tanks. Gasoline is allowed to be stored in four of these tanks, and fuel oil can be stored in any of the seven existing tanks. A "prover" tank is used for flow calibration, and a "trans-mix" tank is used to store process waste products. The petroleum products are transferred from the tanks to carrier tanks by the loading rack system. The petroleum products are delivered off-site by the carrier tanks.

Storage tanks #301, #304, #311, and #321 are capable of storing distillate fuel oil as well as gasoline. Storage tanks #302, #305, and #306 can only store distillate fuel oil.

The mobile carrier tank, generally drawn by a semi tractor, is situated in either of the two loading rack bays where one or more loading rack arms are attached to the carrier tank. Either gasoline or a distillate fuel oil product is transferred from the storage tank to the loading rack system, which delivers the product to the carrier tank. The loading rack arms are designed to load the carrier tanks from the bottom, which reduces the amount of VOCs and HAPs vapors generated compared to the method that uses a top splash loading design. Chemical additives temporarily stored in additive storage tanks may be blended with the gasoline or distillate fuel oil product during loading of the carrier tank. The additives are introduced at the loading rack.

4.2 Facility Classification

The facility is classified as A, in accordance with IDAPA 58.01.01.008.10, for Tier I permitting purposes because the facility has the PTE of 298 T/yr of VOCs. This facility is also major as defined in IDAPA 58.01.01.006.55. The facility is subject to PSD permitting requirements because the facility's PTE is greater than 250 T/yr for VOCs if the facility modifies in a manner that triggers IDAPA 58.01.01.205 (Permit Requirements for New Major Facilities or Major Modifications in Attainment or Unclassifiable Areas). This facility is an area source for HAPs, and is not subject to the Bulk Gasoline Distribution MACT.

4.3 Area Classification

The facility is located within AQCR 63 and is located in Cassia County, which is classified as unclassifiable for all federal and state criteria pollutants (i.e., SO_2, NO_X, CO, PM_{10}, O_3, fluorides, and lead). There are no Class I areas within 10 km of the facility. PSD has been triggered in the area for NO_X on October 25, 1991 and TSP on December 11, 1978.

4.4 Permitting History

Based on the review of the contents of the source file for the Sinclair Burley facility, the following chronological history has been established for the facility's permitting history.

On December 7, 1992, the Department received an application requesting permission to emit hydrocarbons for a pilot test to assess environmental contamination at the Burley site. On December 18, 1992, the Department responded with an exemption letter for the vapor extraction pilot plant project.

Sinclair submitted a site-wide air emissions inventory dated March 24, 1994, in response to an information request letter from the Department.

On April 12, 1994, the Department received a request for an exemption for a PTC for a project replacing the existing top loading rack equipment with bottom loading rack equipment.

On April 22, 1994, the Department notified Sinclair that the proposed project did not require a PTC.

On July 1, 1994, the Department notified Sinclair of the requirement to submit a Tier I operating permit application in the future, and requested that Sinclair submit a preferred application due date, if desired.

On March 13, 1995, the Department received an explanation from Sinclair that the proposed loading rack replacement was in progress. The orientation of the loading rack bays was altered to a parallel arrangement.

On June 26, 1995, the Department received Sinclair's Tier I operating permit application.

On August 12, 1995, the Department requested additional information in support of the Tier I application.

On August 25, 1995, the Department declared the Tier I operating permit application incomplete, and requested the submittal of additional information.

On September 12, 1995, the Department received an application for a Tier II operating permit from Sinclair, for the purpose of establishing the Burley facility as a synthetic minor source of HAPs emissions. Additional information was also submitted with the package for both the Tier I and Tier II operating permit applications. Issuance of the Tier II operating permit was intended to exempt the facility from being subject to the control installation requirements of the Gasoline Distribution MACT.

On September 15, 1995, Sinclair submitted notification of initial applicability to Stage 1 of the Gasoline Distribution MACT.

On October 12, 1995, the Department declared the Tier II operating permit application administratively complete.

On November 17, 1995, the Department declared the Tier I operating permit application administratively complete.

On November 29, 1995, the Department received a submittal of additional information for the Tier I and Tier II operating permit applications from Sinclair. The information package documented the basis of analysis for Sinclair's HAP and VOC emissions.

On November 29, 1995, the Department requested that Sinclair grant the Department a 30-day extension to the timeline on the development of a proposed action for the Tier II operating permit.

On December 4, 1995, the Department received Sinclair's letter that granted the Department a 30-day extension to the timeline.

On January 8, 1996, the Department received an authorization letter from Sinclair granting a 21-day extension to the timeline.

On January 10, 1996, the Department received a submittal of additional information to complete the technical analysis for the Tier II operating permit.

On February 16, 1996, a proposed Tier II operating permit was finalized for a public comment period.

On April 29, 1996, the Department received a formal request to hold issuance of the Burley Tier II operating permit while Sinclair contemplated a revision of the permit's emission limits.

On May 3, 1996, the Department formally notified Sinclair that the request for stay of issuance was honored. On June 17, 1996, the Department received a revised Tier II permit application requesting a lower throughput of gasoline and a higher throughput of distillate fuel. The Tier II permit was revised and submitted for public comment.

On August 23, 1996, the Department issued Sinclair a revised Tier II operating permit that incorporated the changes in product throughput, emission limits, and changes in the Department air quality permitting policies following the date of the initial public comment period.

On December 13, 1996, the Department received a copy of Sinclair's required notification to EPA Region 10 of the Burley, Idaho facility's official status as a non-major source of HAPs emissions. This notification met the requirement of 40 CFR 63.428(a). The facility is therefore, exempted from MACT requirements for Bulk Gasoline Distribution Terminals.

On September 8, 1998, the Department received a submittal dated September 1, 1998, from Sinclair that consisted of an update to the Tier I permit application.

On October 30, 1998, the Department declared the Tier I operating permit application and update complete. Sinclair was notified of the completeness determination in writing.

On February 16, 2000, the draft Tier I operating permit, technical memorandum, and permit application for Sinclair's Burley facility were made available for public comment as required by IDAPA 58.01.01.364.

Written comments were submitted by the Sinclair Oil Company and the EPA Region 10, on March 13, 2000, and March 16, 2000, respectively. No other comments were received. A public hearing was not requested.

The public comment period ended on March 17, 2000.

On May 21, 2001, the Department received an application dated May 18, 2001, for a Tier II operating permit renewal.
No additional permitting actions were discovered in the Department 's files. No archived file was available for documentation of permitting, complaint, and compliance history.

4.5 EMISSIONS DESCRIPTION

The facility is a source of VOC and HAP emissions. These pollutants are emitted due to the storage and transfer of gasoline and distillate fuels from storage tanks, the loading rack operation, and other fugitive emissions sources that include valves, piping flanges, and other seals.

4.6 Hazardous Air Pollutants (HAPs)

HAPs are present in the various petroleum products stored and transferred at the facility. HAPs are emitted due to the volatilization of the liquid HAPs into the vapor phase while the products are stored in tanks, transferred through piping, and loaded into carrier tanks (tanker trucks). The largest amount of HAPs are emitted during the transfer of petroleum products from storage tanks to the mobile carrier tanks through the loading rack system.

HAPs emissions are mainly a result of gasoline service. Gasoline has a significantly higher HAPs content in both number of species and amounts in comparison to distillate fuels oils (such as Diesel Fuel #1, #2, etc.). The volatility of gasoline far exceeds that of distillate fuel oils, and thus the actual and potential air emissions are orders of magnitude larger for gasoline products. HAPs emissions for gasoline are based on assumptions used in developing the Tier II operating permit with Sinclair.

The emission estimates of HAPs are based on the permittee's "typical" formulation of petroleum products. In this case, gasoline and distillate fuel oil were the products used in the emissions inventory. For gasoline a typical makeup of HAPs components and an average Reid vapor pressure of 10 psia were used as inputs to the TANKS estimation software. The Tier I operating permit does not create truly enforceable limitations on the individual HAPs species emissions that would require the permittee to sample and analyze the fuel for individul HAP concentrations. The Tier I operating permit also doesn't create enforceable limitations or requirements for the Reid vapor pressure of the gasoline and distillate fuels. The requirements listed in 40 CFR 80 address the regulation of fuels and fuel additives. The requirements of 40 CFR 80 are not applicable requirements for Title V permitting purposes.

The individual HAPs and aggregated HAPs emissions were estimated using the average annual volatility, which equates to a Reid Vapor pressure of 10 psia, and the average HAPs composition based upon past sampling and testing as inputs for EPA's TANKS 2.0 program. The assumed HAPs composition was derived by the permittee during the development of a Tier II synthetic minor operating permit. The purpose of the Tier II operating permit was to create state and federally enforceable limitations on individual and aggregated HAPs emissions, and exempt the facility from being subject to the requirements of 40 CFR 63 – Subpart R (National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)).

TANKS 2.0 is a calculation program built upon equations and assumptions documented in EPA's AP-42 compilation of emission factors. Physical property data for the organic liquids was developed by EPA and the American Petroleum Institute (API). Physical design data and local climatic data are also included in the estimation software. The Tier II operating permit, and hence, the Tier I operating permit, adequately limit the

individual HAP and aggregated HAPs emissions by establishing annual emission limits based on throughput limitations and the assumptions utilized in the estimation software for individual and aggregated HAPs emissions.

TANKS 2.0 software was used as the basis for the Tier II operating permit's emissions and product throughput limitations. TANKS 2.0 has been superceded by more up-to-date versions of the software. The current version is titled TANKS 4.09.b. The original Tier II operating permit expired on August 24, 2001, and Sinclair applied for a Tier II operating permit renewal prior to the permit's expiration. The requirements of the expired Tier II operating permit will be used to establish the applicable requirements in the Tier I operating permit. The Tier I operating permit will need to be reopened at some point to incorporate any items from the Tier II operating permit which differ from the existing Tier I operating permit.

4.1 FACILITY-WIDE POTENTIAL TO EMIT REGULATED AIR POLLUTANTS[1]

Emission Unit #	Emission Unit Identification/Description	Potential to Emit VOCs (T/yr)	Potential to Emit Aggregated HAPs (T/yr)
1	Tank 301	2.26	0.097
2	Tank 304	2.26	0.097
3	Tank 311	2.26	0.097
4	Tank 321	2.26	0.097
5	Tank 321	0.41	0.010
6	Tank 305	0.41	0.010
7	Tank 306	0.41	0.010
9	Prover Tank	0.21	0.006
10	Loading Rack – Gasoline Service	283	7.64
	Loading Rack – Distillate Fuel Oil Service	3.38	0.086
11	Fugitive Emissions	1.26	0.209
	Total Annual Emissions	298	8.35

[1] Taken from Tier II operating permit issued 8/31/96.

A facility-wide breakdown of HAPs emissions is included below.

4.2 FACILITY-WIDE POTENTIAL TO EMIT HAPS

POLLUTANT	POTENTIAL EMISSIONS (T/yr)
Aggregated Hazardous Air Pollutants (HAPs)	8.38
Individual HAPs: Benzene	1.60
Ethyl benzene	0.17
Hexane	2.56
Naphthalene	0.0053
Toluene	2.39
Trimethylpentane 2, 2, 4 (Iso-Octane)	0.58
Xylenes (isomers m-, o-, and p- combined)	1.07

Potential emissions of any individual HAP are limited below 10 T/yr. Potential emissions of aggregated HAPs are limited below 25 T/yr. The facility is regarded as an "area" (or non-major) HAP source, and is exempted from being subject to 40 CFR 63 – Subpart R. The facility is a major source for VOC emissions.

5. REGULATORY ANALYSIS

5.1 Facility-Wide Applicable Requirements

5.1.1 Fugitive Particulate Matter - IDAPA 58.01.01.650-651

5.1.1.1 Requirement

Facility-wide Condition 1.1 states that all reasonable precautions shall be taken to prevent particulate matter from becoming airborne in accordance with IDAPA 58.01.01.650-651.

5.1.1.2 Compliance Demonstration

Facility-wide Condition 1.2 states that the permittee is required to monitor and maintain records of the frequency and the methods used by the facility to reasonably control fugitive particulate emissions. IDAPA 58.01.01.651 gives some examples of ways to reasonably control fugitive emissions which include using water or chemicals, applying dust suppressants, using control equipment, covering trucks, paving roads or parking areas, and removing materials from streets.

Facility-wide Condition 1.3 requires that the permittee maintain a record of all fugitive dust complaints received. In addition, the permittee is required to take appropriate corrective action as expeditiously as practicable after a valid complaint is received. The permittee is also required to maintain records that include the date that each complaint was received and a description of the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

To ensure that the methods being used by the permittee to reasonably control fugitive particulate matter emissions whether or not a complaint is received, Facility-wide Condition 1.4 requires that the permittee conduct periodic inspections of the facility. The permittee is required to inspect potential sources of fugitive emissions during daylight hours and under normal operating conditions. If the permittee determines that the fugitive emissions are not being reasonably controlled the permittee shall take corrective action as expeditiously as practicable. The permittee is also required to maintain records of the results of each fugitive emission inspection.

Both Facility-wide Conditions 1.3 and 1.4 require the permittee to take corrective action as expeditiously as practicable. In general, the Department believes that taking corrective action within 24 hours of receiving a valid complaint or determining that fugitive particulate emissions are not being reasonably controlled meets the intent of this requirement. However, it is understood that, depending on the circumstances, immediate action or a longer time period may be necessary.

5.1.2 Control of Odors - IDAPA 58.01.01.775-776

5.1.2.1 Requirement

Facility-wide Condition 1.5 and IDAPA 58.01.01.776 both state that: "No person shall allow, suffer, cause or permit the emission of odorous gases, liquids or solids to the atmosphere in such quantities as to cause air pollution." This condition is currently considered federally enforceable until such time it is removed from the State Implementation Plan (SIP), at which time it will be a state-only enforceable requirement.

5.1.2.2 Compliance Demonstration

Facility-wide Condition 1.6 requires the permittee to maintain records of all odor complaints received. If the complaint has merit, the permittee is required to take appropriate corrective action as expeditiously as practicable. The records are required to contain the date that each complaint was received and a description of the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

Facility-wide Condition 1.6 requires the permittee to take corrective action as expeditiously as practicable. In general, the Department believes that taking corrective action within 24 hours of receiving a valid odor complaint meets the intent of this requirement. However, it is understood that, depending on the circumstances, immediate action or a longer time period may be necessary.

5.1.3 Visible Emissions - IDAPA 58.01.01.625

5.1.3.1 Requirement

IDAPA 58.01.01.625 and Facility-wide Condition 1.7 states that "(No) person shall discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined . . ." by IDAPA 58.01.01.625. This provision does not apply when the presence of uncombined water, NO_x, and/or chlorine gas are the only reason(s) for the failure of the emission to comply with the requirements of this rule. This condition was not included in the draft Tier I operating permit that underwent public comment, however, it is being included in the proposed Tier I operating permit.

5.1.3.2 Compliance Demonstration

To ensure reasonable compliance with the visible emissions rule, Facility-wide Condition 1.8 requires that the permittee conduct routine visible emissions inspections of the facility. The permittee is required to inspect potential sources of visible emissions, during daylight hours and under normal operating conditions. The visible emissions inspection consists of a see/no see evaluation for each potential source of visible emissions. If any visible emissions are present from any point of emission covered by this section, the permittee must either take appropriate corrective action as expeditiously as practicable, or perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of thirty observations shall be recorded when conducting the opacity test. If opacity is determined to be greater than 20% for a period or periods aggregating more than three minutes in any 60-minute period, the permittee must take corrective action and report the exceedence in its annual compliance certification and in accordance with the excess emissions rules in IDAPA 58.01.01.130-136. The permittee is also required to maintain records of the results of each visible emissions inspection and each opacity test when conducted. These records must include the date of each inspection, a description of the permittee's assessment of the conditions existing at the time visible emissions are present, any corrective action taken in response to the visible emissions, and the date corrective action was taken.

It should be noted that if a specific emission unit has a compliance demonstration method for visible emissions that differs from Facility-wide Condition 1.8, then that specific compliance demonstration method overrides the requirement of condition 1.8. Permit Condition 1.8 is intended for small sources that would generally not exhibit any visible emissions.

Facility-wide Condition 1.8 requires the permittee to take corrective action as expeditiously as practicable. In general, the Department believes that taking corrective action within 24 hours of discovering visible emissions meets the intent of this requirement. However, it is understood that, depending on the circumstances, immediate action or a longer time period may be necessary.

5.1.4 Startup, Shutdown, Scheduled Maintenance, Safety Measures, Upset and Breakdown-IDAPA 58.01.01.130-136

5.1.4.1 Requirement

Facility-wide Condition 1.9 requires that the permittee comply with the requirements of IDAPA 58.01.01.130-136 for startup, shutdown, scheduled maintenance, safety measures, upset, and breakdowns. This section is fairly self-explanatory and no additional detail is necessary in this technical analysis. It should; however, be noted that subsections 133.02, 133.03, 134.04, and 134.05 are not specifically included in the permit as applicable requirements. These provisions of the Rules only apply if the permittee anticipates requesting consideration under subsection 131.02 of the Rules to allow the Department to determine if an enforcement action to impose penalties is warranted. Section 131.01 states ". . . The owner or operator of a facility or emissions unit generating excess emissions shall comply with Sections 131, 132, 133.01, 134.01, 134.02, 134.03, 135, and 136, as applicable. If the owner or operator anticipates requesting consideration under Subsection 131.02, then the owner or operator shall also comply with the applicable provisions of Subsections 133.02, 133.03, 134.04, and 134.05." Failure to prepare or file procedures pursuant to

Sections 133.02 and 134.04 is not a violation of the Rules in and of itself, as stated in subsections 133.03.a and 134.06.b. Therefore, since the permittee has the option to follow the procedures in Subsections 133.02, 133.03, 134.04, and 134.05; and is not compelled to, the subsections are not considered applicable requirements for the purpose of this permit and are not included as such.

5.1.4.2 Compliance Demonstration

The compliance demonstration is contained within the text of Facility-wide Condition 1.9. No further clarification is necessary here.

5.1.5 Excess Emissions

The permittee is required to comply with the provisions for excess emissions specified by IDAPA 58.01.01.130-136.

According to the permit application materials, the facility has no startup or shutdown excess emissions. The facility's air pollutant emissions are not controlled by any emissions control devices that are affected by startup, shutdown, or scheduled maintenance. All sources emit the same amount of pollutants during startup, regular operation, and shutdown.

Excess emissions due to maintenance activities include:

- pipe cleaning;
- pipe pressure testing;
- gasket material replacement;
- storage tank cleaning;
- instrument maintenance;
- pump maintenance.

The maintenance activities occur infrequently, and emissions are minimized by using the practices established within the petroleum industry for these activities. The requirements and procedures concerning excess emission procedures are specifically addressed by Permit Condition 1.9 in the facility-wide conditions section.

5.1.6 Open Burning

This facility's operating practices would preclude open burning from ever taking place on site due to the explosion hazard caused by open burning. However, the permit contains the standard Facility-wide Condition 1.12. The regulation is found at IDAPA 58.01.01.600-616 and establishes the restrictions and allowances for open burning.

5.1.7 Renovation/Demolition

The permittee is required to comply with the applicable requirements of the asbestos NESHAP when conducting any renovation or demolition activities at the facility. The standard requirement for 40 CFR Part 61, Subpart M, was included in the permit as condition 1.13.

5.1.8 Chemical Accident Prevention Provisions

Clean Air Act Section 112(r) Risk Management Plan

On January 6, 1998, the EPA published the final rule for 40 CFR Part 68 - List of Regulated Substances and Thresholds for Accidental Release Prevention in the federal register. Gasoline has been exempted from the requirement of submitting a formal risk management plan. The summary of this action can be found on the EPA website at the following site address (as of the date of this memorandum):

http://www.epa.gov/fedrgstr/EPA-AIR/1998/January/Day-06/a267.htm

This exemption was contained in the January 6, 1998 Volume 63, Number 3, pages 639-645, of the Federal Register. The risk management plan applicability threshold listed in 40 CFR 68.115(b) was modified to exempt flammable substances in gasoline used as fuel for internal combustion engines. Thus, if the substances are exempted from any applicability determination, it is not subject to the risk management plan reporting requirement. The basis for this exemption is laid out as follows:

40 CFR 68 - Subpart F - Regulated Substances for Accidental Release Prevention establishes the list of the substances subject to the 112(r) Risk Management Plan requirements. Section 40 CFR 60.115(b) states:

- *For the purposes of determining whether more than a threshold quantity of a regulated substance is present at a stationary source, the following exemptions apply:"*
- *40 CFR 68.115(b)(2)(ii) Gasoline. Regulated substances in gasoline, when in distribution or related storage for use as fuel for internal combustion engines, need not be considered when determining whether more than a threshold quantity is present at a stationary source.*

The standard language for a facility not currently subject to risk management plan requirements was added in response to EPA Region 10's public comment.

5.1.9 Recycling and Emission Reductions

The standard permit condition for recycling of refrigerants is included in Permit Condition 1.22. This requirement addresses the steps used to minimize atmospheric ozone layer depletion.

5.1.10 Fuel-Burning Equipment

This facility has not identified any fuel burning equipment that is subject to the grain loading standards specified by IDAPA 58.01.01.675, in its Tier I operating permit application.

The Tier I operating permit does not contain the grain loading emission standards or any compliance demonstrations as applicable requirements. If the facility installs any such equipment in the future, the Tier I operating permit may need to be revised to reflect this requirement.

5.1.11 Fuel-Sulfur Content

The facility is subject to the state implementation plan's limitation on sulfur content in distillate fuels. The permittee identified that the facility distributes distillate fuels Grades 1 and 2. Permit Condition 1.16 contains the applicable requirement of IDAPA 58.01.01.728, and reads:

1.16 No person shall sell, distribute, use, or make available for use any distillate fuel oil containing more than the following percentages of sulfur:

1.16.1 ASTM Grade 1 fuel oil - 0.3 percent by weight.

1.16.2 ASTM Grade 2 fuel oil - 0.5 percent by weight.

Compliance will be demonstrated by either of two methods specified in Permit Condition 1.17. The method used by Sinclair must be specified in a logbook. The first method listed in 1.17.1 consists of a fuel sampling and sulfur content analysis for each shipment of distillate fuel delivered to the facility from the petroleum product pipeline. The test results must be kept in a log and the supporting information must be kept on-site. The minimum duration for record retention and minimum recordkeeping content is specified by Permit Condition 1.11. Sampling and testing methods may be revised as allowed by IDAPA 58.01.01.157–Test Methods and Procedures.

Sinclair's other option for demonstrating compliance is to obtain and maintain documentation of the actual sulfur content in weight percent for each shipment received from the refinery that manufactured the distillate fuel oil.

5.1.12 NSPS

This facility operates several sources that have a NSPS promulgated for that source category. Loading rack operations are covered by 40 CFR 60 Subpart XX. The initial construction of the loading pre-dated the applicability of this standard. EPA's public comment asked why the NSPS was not triggered in 1994 when Sinclair replaced the loading rack.

The loading rack was not replaced in 1994. Rather, top loading rack equipment was replaced with bottom loading rack equipment, resulting in an emissions decrease. In a letter dated April 12, 1994, the Department notified Sinclair in writing that this proposed project was not a modification and that a permit to construct was not required. Based upon this information, PSD was not triggered. The information provided by Sinclair to EPA in the August 13, 2000, submittal indicates that the cost of alterations to the loading rack was less than 50% of the total capital cost of replacement of all equipment associated with the loading rack system. The equipment listed in the NSPS that is considered loading rack equipment includes "...loading arms, pumps, meters, shutoff valves, and other piping and valves necessary to fill delivery tank trucks," per 40 CFR 60.501. Consequently, NSPS Subpart XX emissions control requirements do not apply to the loading rack.

NSPS Subparts K, Ka, or Kb do not apply to the storage vessels (tanks) listed in this permit. This is based upon information provided by the permittee.

5.1.13 NESHAPS – 40 CFR 61 AND 63

Sinclair's facility is in a source category regulated by the Bulk Gasoline and Distribution MACT, per 40 CFR 63 – Subpart R. The Facility is not subject to the MACT requirements at this time because the facility is complying with all state and federally enforceable limitations on its potential to emit HAPs. The Haps limitations were created by issuance of a Tier II synthetic minor operating permit on August 23, 1996. The Tier I Op contains these emissions limitations as applicable requirements, which maintain the facility-wide potential to emit below the applicability threshold of 10T/yr for a single HAP, and 25 T/yr for any combination of HAPs.

5.1.14 Compliance Testing

The permittee is required to demonstrate compliance with the sulfur content standards for distillate fuels specified by IDAPA 58.01.01.728 according to either of the methods listed in Permit Condition 1.17.1 or 1.17.2.

The procedures listed in Permit Condition 1.17.1 constitute on-going sampling and testing for each shipment of distillate fuel oil meeting ASTM Grade 1 or ASTM Grade 2 (commonly referred to as #1 or #2 distillate, respectively).

No other compliance testing has been specified in the Tier I operating permit.

5.1.15 Test Methods

The permittee is required to test for sulfur content in fuels if the first of the two options is selected as the method of compliance demonstration for the standards listed in Permit Condition 1.16.

1.17.1 The permittee shall determine the sulfur content of each shipment of distillate fuel received by the facility. The reference test method for measuring fuel sulfur content shall by ASTM method, D129-95 Standard Test for Sulfur in Petroleum Products (General Bomb Method) or such comparable and equivalent method approved in accordance with Subsection 157.02.d. Test methods and

procedures shall comply with Section 157. The results of each test performed shall be recorded in a log. The supporting analysis information shall also be kept onsite; or

1.17.2 The permittee shall obtain documentation of the sulfur content analysis of each shipment of distillate fuel from the refinery that produced the fuel. The documentation shall clearly state the sulfur content in weight percent of sulfur present in the fuel sample and shall reference the method of analysis used to determine the sulfur content in the fuel oil.

Permit Condition 17.1 allows the permittee to formally request an alternative testing method to ASTM D129-95 - Standard Test for Sulfur in Petroleum Products. The permittee may wish to alter the method due to testing cost considerations and updated test method procedures. In any case, the method allowed should accurately quantify the sulfur content. The request for a change must be formally submitted to the Department in accordance with IDAPA 58.01.01.157 procedures, and approval must be granted by the Department prior to use in establishing compliance with the standard.

5.1.16 Reports and Certifications

Permit Condition 1.10 addresses the timeliness of submittals. The permittee is allowed up to 30 days after the date of the specified reporting period to submit the reports, compliance certifications, and other notifications.

Monitoring reports are required to be submitted over every six months as specified by General Provision 24.

General Provision 21 specifies the initial and subsequent compliance certifications as an annual submittal, unless otherwise required by an applicable requirement.

5.1.17 Monitoring and Recordkeeping

The permittee is required to comply with several permit conditions addressing monitoring and recordkeeping. The standard facility-wide permit condition has been included as Permit Condition 1.11, which reads:

> *The permittee shall maintain sufficient recordkeeping to assure compliance with all of the terms and conditions of this operating permit. Recording of monitoring information shall include, but not be limited to: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to Department representatives upon request.*

Permit Condition 1.11 requires the permittee to maintain the necessary documentation and identify the methods used to determine compliance with permit conditions. This information will be used for the facility's compliance certification, required in General Provision 21.

The permittee is required to monitor and record the fuel type (gasoline or distillate fuel) and throughput of each fuel to each of the tanks and the loading rack. This information is to be compiled on a monthly basis for each emission unit, and this information will be used to demonstrate compliance with the following:

- Fuel type requirements for the storage tanks allowed to only store distillate fuel;
- 12-month rolling annual fuel throughput limitations;
- 12-month rolling annual emissions limitations on VOCs and HAPs.

One of EPA's comments stated that a compliance schedule is needed if fuel monitoring equipment requirements in the facility's Tier II operating permit had not been met, or a discussion if they had. This paragraph is the required discussion. Because the facility has certified compliance, it was assumed that the equipment has already been installed and calibrated. Therefore, the current Tier I operating permit only requires the facility to maintain and operate the equipment required in their Tier II operating permit. The monitoring equipment has already been installed to monitor the throughput of the gasoline or distillate fuel to the storage tanks and the loading rack. Permit Conditions 2.7, 3.7, 4.7, and 5.7 reflect the monitoring equipment requirement.

The emissions unit identified as the Prover Tank is itself a calibration device. This tank's exact volume is known, and is used to periodically calibrate the flowmeter devices. The flowmeter monitors distillate and gasoline throughputs to support the monitoring and recordkeeping requirements.

6. DISCRETE EMISSIONS UNITS

6.1 Gasoline Storage Tanks

The storage tanks are grouped in the permit according to type of fuel each tank is allowed to store. Tank# 301, 304, 311, and 321 store either gasoline or distillate fuel oil (or less volatile petroleum products), as initially established in the Tier II operating permit.

6.1.1 Emission Description

Each of the tanks in this group is equipped with an external floating roof to control VOCs and HAPs emissions. VOCs and HAPs are emitted primarily due to standing and working losses. Standing losses are due primarily to ambient temperature and pressure changes. The process of filling the tank with petroleum products causes the amount of vapor present in the tank that is displaced by the liquid to be released to the atmosphere. These VOCs and HAPs emissions are referred to as working losses.

6.1.2 Applicable Requirements

Several individual applicable requirements are used to create the enforceable synthetic minor emission limits for the annual emission limits on VOCs and aggregated HAPs emissions for storage tanks 301, 304, 311, and 321. Individual HAP limitations, such as benzene and xylenes, were included in the permit analysis but not as permit limitations. The specific applicable requirements which are emission limits for each of these tanks are 2.26 T/yr for VOCs, and 0.097 T/yr of aggregated HAPs.

The associated applicable requirement for the pollutant emission limits is a rolling 12 month gasoline throughput limitation which is applied to each tank individually. The throughput limit of 86,359,000 U.S. gallons per year (where a year is any consecutive 12 month period) inherently limits the individual HAPs emissions, and directly limits the aggregated HAPs and VOCs emissions. Each tank's throughput limitation is an individual applicable requirement, and actually is the effective method for limiting air pollutant emissions.

The permittee may store either gasoline, or distillate fuel oil petroleum products (or less volatile petroleum products), but the allowable emissions reflect worst case material, which is gasoline. The permittee is also required to "...maintain and operate fuel monitoring equipment to monitor the fuel throughput for each tank."

6.1.3 Compliance Determination

The Tier II operating permit established operating requirements for the permittee to monitor the type of fuel (gasoline or distillate). The permittee is required to monitor the fuel type even though the worst case assumption of all fuel throughput being gasoline was utilized in developing the 1996 Tier II operating permit's emission limits. The permittee will also be required to monitor fuel throughput for each tank, with the data to be compiled monthly, and must demonstrate compliance with a 12 month rolling summation limit.

This summation value must be below the limitation of 86,395,000 U.S. gallons of petroleum product per year. This surrogate parameter will establish the compliance or non-compliance status for each tank. These requirements adequately fulfill the Title V requirement to establish a reasonable assurance of compliance by following the guidelines of periodic monitoring and recordkeeping.

The permittee must also maintain and operate fuel monitoring equipment to determine what the fuel throughput actually is.

6.1.4 Emission Limits and Standards Authority

The citations for the emission limit authority are Tier II operating permit No.031-00026, issued August 23, 1996, and the authority under which that permit was issued, namely IDAPA 58.01.01.401.01(d).

6.1.5 Monitoring Requirements

The Tier I operating permit will incorporate the existing monitoring and recordkeeping requirements from the Tier II operating permit. The permittee will be required monitor the following information:

the type of product (gasoline or distillate fuel oil);
the quantity of throughput (U.S. gallons)

6.1.6 Testing Requirements

There are no testing requirements which specifically apply to these tanks.

6.1.7 Recordkeeping Requirements

The permittee must record the information listed in Section 6.1.5, and then compile the information on a monthly basis.

Standard requirements for recordkeeping of monitoring information must include the following items:

- The date, place (as defined in the Tier I operating permit) and time of sampling or measurement;
- The date(s) analyses were performed;
- The company or entity that performed the analyses;
- The analytical techniques or methods used;
- The results of such analyses; and
- The operating conditions existing at the time of sampling or measurement.

All monitoring records and support information must be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.

6.1.8 Reporting Requirements

The permittee must submit certified semi-annual reports of all required monitoring listed above in Section 6.1.5. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semi-annual report.

6.2 Distillate Fuel Oil Storage Tanks

The storage tanks are grouped in the permit according to type of petroleum product that the tanks are allowed to store. These tanks store distillate fuel oil and are designated as follows:

EU#5 - Tank #302
EU#6 - Tank #305
EU#7 - Tank #306

6.2.1 Emission Description

Each of the tanks in this group is a fixed roof design. VOCs and HAPs are emitted due to standing and working losses. Standing losses are due primarily to ambient temperature and pressure changes. The process of filling the tank with petroleum products causes the amount of vapor present in the tank that is displaced by the filling liquid to be released to the atmosphere. These VOCs and HAPs emissions are referred to as working losses.

6.2.2 Applicable Requirement

Several individual applicable requirements are used to create the enforceable synthetic minor emission limits for emission limits on VOCs and aggregated HAPs emissions for storage tanks 302, 305, and 306. Individual HAP limitations, such as benzene and xylenes, were included in the permit analysis but not as permit limitations. The specific applicable requirements which are emission limits for each of these tanks are 0.41 T/yr for VOCs, and 0.010 T/yr of aggregated HAPs.

The associated applicable requirement for the pollutant emission limits is a rolling 12 month gasoline throughput limitation is applied to each tank individually. The throughput limit of 155,599,500 US gallons per year (where a year is any consecutive 12 month period) inherently limits the individual HAPs emissions, and directly limits the aggregated HAPs and VOCs emissions. Each tank's throughput limitation is an individual applicable requirement.

The permittee may store distillate fuel oil. Allowable emissions reflect distillate fuel oil as the process material. The permittee is also required to "...maintain, and operate fuel monitoring equipment to monitor the fuel throughput for each tank."

6.2.3 Compliance Determination

The Tier I operating permit incorporates the Tier II operating permit's operating, monitoring, and recordkeeping requirements. The permittee must monitor the type of fuel (distillate) and fuel throughput for each tank, with the data to be compiled monthly for use in demonstrating compliance with a 12 month rolling summation limit. Each 12 month summation value must be below the 155,599,500 U.S. gallon of petroleum product per year throughput limitation. This surrogate parameter will establish the compliance or non-compliance status for each tank. These requirements adequately fulfill the Title V requirement to establish a reasonable assurance of compliance by following the guidelines of periodic monitoring and recordkeeping.

The permittee must also maintain and operate fuel monitoring equipment to determine what the fuel throughput actually is.

6.2.4 Emission Limits and Standards Authority

The citations for the emission limit authority are Tier II operating permit No.031-00026, issued August 23, 1996, and the authority under which that permit was issued, namely IDAPA 58.01.01.401.01(d).

6.2.5 Monitoring Requirements

The Tier I operating permit will incorporate the existing monitoring and recordkeeping requirements The Tier II operating permit required that the permittee monitor the following information:

the type of product (distillate fuel oil);
the quantity (U.S. gallons) of throughput

6.2.6 Testing Requirements

There are no testing requirements which specifically apply to these tanks.

6.2.7 Recordkeeping Requirements

The permittee must record the information listed in section 6.2.5, and then compile the information on a monthly basis.

Standard requirements for recordkeeping of monitoring information must include the following items:

- The date, place (as defined in the Tier I operating permit) and time of sampling or measurements;
- The date(s) analyses were performed;
- The company or entity that performed the analyses;
- The analytical techniques or methods used;
- The results of such analyses; and
- The operating conditions existing at the time of sampling or measurement.

All monitoring records and support information must be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.

6.2.8 Reporting Requirements

The permittee must submit certified semi-annual reports of all required monitoring listed above in Section 6.2.5. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semi-annual report.

6.3 Prover Tank

The prover tank is identified as EU #9, or Tank #300.

6.3.1 Emission Description

This tank is a fixed roof tank which is used to calibrate the fuel monitoring equipment used by comparing the monitoring equipment's reading against a known tank volume. VOCs and HAPs are emitted due to standing and working losses. Standing losses are due primarily to ambient temperature and pressure changes. Standing losses would be minimal as this tank is not intended for long term storage. The process of filling the tank with petroleum products causes the amount of vapor present in the tank that is displaced by the liquid to be released to the atmosphere. These VOCs and HAPs emissions are referred to as working losses.

6.3.2 Applicable Requirements

Several individual applicable requirements are used to create the enforceable synthetic minor emission limits for the hourly and annual emission limits on VOCs and aggregated HAPs emissions for the prover tank. Individual HAP limitations, such as benzene and xylenes, were included in the permit analysis but not as permit limitations. The specific applicable requirements which are emission limits for the tank are 0.21 T/yr for VOCs, and 0.006 T/yr of aggregated HAPs. These are extremely small emissions, and the levels easily qualify for treatment as insignificant activities under IDAPA 58.01.01.317; however, the emission unit was subject to applicable requirements from the Tier II operating permit which must be included in the Title V permit.

The associated applicable requirement for the pollutant emission limits is a rolling 12 month gasoline throughput limitation is applied to each tank individually. The throughput limit of 220,200 U.S. gallons per year (where a year is any consecutive 12 months) inherently limits the individual HAPs emissions, and directly limits the aggregated HAPs and VOCs emissions. The tank's throughput limitation is an individual applicable requirement.

The permittee may store either gasoline or distillate fuel oil petroleum products, but the allowable emissions reflect worst case material, which is gasoline.

The permittee is also required to "... maintain and operate fuel monitoring equipment to monitor the fuel throughput for this tank."

6.3.3 Compliance Determination

The Tier II operating permit established operating requirements for the permittee to monitor the type of fuel (gasoline or distillate). The permittee is required to monitor the fuel type even though the worst case assumption of all fuel throughput being gasoline was utilized in developing the 1996 Tier II operating permit's emission limits. The permittee is also required to monitor fuel throughput for the tank, with the data to be compiled monthly, and must demonstrate compliance with a 12 month rolling summation limit. This summation value must be below the throughput limitation of 220,200 U.S. gallons of petroleum product per year. This surrogate parameter will establish the compliance or non-compliance status for the prover tank. These requirements adequately fulfill the Title V requirement to establish a reasonable assurance of compliance by following the guidelines of periodic monitoring and recordkeeping.

The permittee must also maintain, and operate fuel monitoring equipment to determine what the fuel throughput actually is (the prover tank itself actually provides a check for the calibration of the monitoring equipment).

6.3.4 Emission Limits and Standards Authority

The citations for the emission limit authority are Tier II operating permit No.031-00026, issued August 23, 1996, and the authority under which that permit was issued, namely IDAPA 58.01.01.401.01(d).

6.3.5 Monitoring Requirements

The Tier I operating permit will incorporate the existing monitoring and recordkeeping requirements from the Tier II operating permit. The Tier I operating permit requires that the permittee record the following information and compile the information monthly:

the type of product (gasoline or distillate fuel oil);
the throughput quantity (U.S. gallons)

6.3.6 Testing Requirements

There are no testing requirements which specifically apply to this tank.

6.3.7 Recordkeeping Requirements

The permittee must record the information listed in section 6.3.5, and then compile the information on a monthly basis.

Standard requirements for recordkeeping of monitoring information must include the following items:

- The date, place (as defined in the Tier I operating permit) and time of sampling or measurements;
- The date(s) analyses were performed;
- The company or entity that performed the analyses;
- The analytical techniques or methods used;
- The results of such analyses; and
- The operating conditions existing at the time of sampling or measurement.

All monitoring records and support information must be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.

6.3.8 Reporting Requirements

The permittee must submit certified semi-annual reports of all required monitoring listed above in Section 6.3.5. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semi-annual report.

6.4 Loading Rack

The loading rack is also identified as EU #10.

6.4.1 Emission Description

Emissions estimates were established using the permittee's requested throughputs of gasoline and distillate fuel oil. The assumptions on gasoline volatility and HAPs contents are identical to those used to estimate emissions and set emission limits for the storage tanks. EPA AP-42 Section 5.2 - Transportation and Marketing of Petroleum Liquids, dated January 1995, was used to estimate the loading rack emissions. The error range for this calculation method is + or - 30%. The loading rack is the single largest source of emissions at this facility. The loading rack currently used at the Sinclair facility is a bottom fill design that reduces air emissions during the carrier tank loading process compared to top fill splash loading operations.

6.4.2 Applicable Requirements

Several individual applicable requirements are used to create the enforceable synthetic minor emission limits for the emission limits on VOCs and aggregated HAPs emissions for the loading rack. Gasoline distribution and distillate fuel oil distribution were separated from each other in the Tier II operating permit due to differences in the materials' physical properties and throughput limitations.

As stated previously, individual HAP limitations, such as benzene and xylenes, were included in the permit analysis but not as permit limitations. The specific applicable requirements which are emission limits for the loading rack are:

Table 6.1 LOADING RACK EMISSION LIMITS

Fuel Type	VOCs (T/yr)	Aggregated HAPs (T/yr)
Gasoline	283.05	7.64
Distillate fuel oil	3.38	0.086

The associated applicable requirement for the pollutant emission limits is a rolling 12 month gasoline throughput limitation applied to the loading rack for gasoline and distillate fuel oil individually. The throughput limitations inherently limit the HAPs emissions, and directly limit the aggregated HAPs and VOCs emissions. The permittee is limited to 107,310,000 U.S. gallons of gasoline, and 462,996,000 U.S. gallons of distillate fuel oil.

The permittee is also required to "...maintain, and operate fuel monitoring equipment to monitor the fuel throughput for the loading rack operation."

6.4.3 Compliance Determination

The Tier II operating permit established operating requirements for the permittee to monitor the type of fuel (gasoline or distillate) and the quantity of fuel dispensed through the loading rack. The data must be compiled monthly, and must demonstrate compliance with a 12 month rolling sum limitation. The value must be below the throughput values listed above in Section 6.4.2. This surrogate parameter will establish the compliance or non-compliance status for the loading rack emission unit. These requirements adequately fulfill the Title V requirement to establish a reasonable assurance of compliance by following the guidelines of periodic monitoring and recordkeeping.

The permittee must also maintain, and operate fuel monitoring equipment to verify fuel throughput.

6.4.4 Emission Limits and Standards Authority

The citations for the emission limit authority are Tier II operating permit No.031-00026, issued August 23, 1996, and the authority under which that permit was issued, namely IDAPA 58.01.01.401.01(d).

6.4.5 Monitoring Requirements

The Tier I operating permit will incorporate the existing monitoring and recordkeeping requirements from the Tier II operating permit. The Tier I operating permit requires that the permittee record the following information:

the type of product (gasoline or distillate fuel oil);
the throughput quantity (U.S. gallons)

6.4.6 Testing Requirements

There are no testing requirements which specifically apply to the loading rack.

6.4.7 Recordkeeping Requirements

The monitoring information must be recorded by the permittee and compiled monthly.

Standard requirements for recordkeeping of monitoring information must include the following items:

- The date, place (as defined in the Tier I operating permit) and time of sampling or measurements;
- The date(s) analyses were performed;

- The company or entity that performed the analyses;
- The analytical techniques or methods used;
- The results of such analyses; and
- The operating conditions existing at the time of sampling or measurement.
- The permittee is required to retain all monitoring records and support information for a period of at least five years from the date of the monitoring sample, measurement, report or application.

6.4.8 Reporting Requirements

The permittee must submit certified semi-annual reports of all required monitoring listed above in Section 6.4.5. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semi-annual report.

7. INSIGNIFICANT ACTIVITIES

Listed below are the insignificant activities described by the source in accordance with IDAPA 58.01.01.317:

Table 7.1 INSIGNIFICANT ACTIVITIES

Emissions Unit or Activity Description	Insignificant Activities Section Citation IDAPA 58.01.01.317.01.b.i And Description	
Petroleum product additives tanks and handling	(3)	VOC storage tanks less than 10,000 gallons capacity and vapor pressure < 80 mm Hg at 21 degrees Celsius
Petroleum product sampling	(1)	Operation of VOC storage tanks < 260 gallons capacity
Maintenance activities	(30)	Applicable Limits: less than 4 tons per year VOCs and less than 1 ton per year any individual HAP
Transmix tank	(30)	Applicable Limits: less than 4 tons per year VOCs and less than 1 ton per year any HAP

8. ALTERNATIVE OPERATING SCENARIOS

Alternative operating scenarios in Tier I operating permit's are addressed by IDAPA 58.01.01.322.04, which reads:

> *All Tier I operating permits shall contain terms and conditions to ensure compliance with all applicable requirements for each alternative operating scenario that was requested by the applicant and approved by the Department, including, but not limited to, a requirement that the owner or operator of the source, contemporaneously with making a change from one operating scenario to another, record the change in an operating scenario log located and retained at the permitted facility.*

The only item which could be regarded to qualify as an alternative operating scenario is contained in Permit Condition 1.17. This permit condition establishes two different methods for the permittee to establish compliance with the distillate fuel sulfur content standards listed in Permit Condition 1.16. Permit Condition 1.17 was altered per EPA's comment that the permittee must identify which method is being used to establish compliance with the sulfur content standards at all times.

Revised Permit Condition 1.17 is listed below:

1.17 The permittee shall establish compliance with the limits specified in Permit Condition 1.16 by fulfilling the requirements of either condition 1.17.1 or 1.17.2 below. The permittee shall, contemporaneously with making a change from one option to the other, record the change in a log located and retained at the permitted facility

1.17.1 The permittee shall determine the sulfur content of each shipment of distillate fuel received by the facility. The reference test method for measuring fuel sulfur content shall by ASTM method, D129-95 Standard Test for Sulfur in Petroleum Products (General Bomb Method) or such comparable and equivalent method approved in accordance with Subsection 157.02.d. Test methods and procedures shall comply with Section 157. The results of each test performed shall be recorded in a log. The supporting analysis information shall also be kept onsite; or

1.17.2 The permittee shall obtain documentation of the sulfur content analysis of each shipment of distillate fuel from the refinery that produced the fuel. The documentation shall clearly state the sulfur content in weight percent of sulfur present in the fuel sample and shall reference the method of analysis used to determine the sulfur content in the fuel oil.

9. TRADING SCENARIOS

There are no trading scenarios for this permit.

10. COMPLIANCE PLAN AND COMPLIANCE CERTIFICATION

10.1 Compliance Plan

There are no compliance plans for this permit.

10.2 Compliance Certification

The permittee is required to submit a periodic compliance certification to the Department's Twin Falls Regional Office and to EPA Region 10 for all emissions units at the facility. This is required by IDAPA 58.01.01.322.11 to certify whether compliance was achieved and to identify the methods used to establish that compliance status during the reporting period. The compliance certification must be submitted annually for Sinclair's Burley facility, unless an applicable requirement is identified that will require the submittal of compliance certifications more frequently than annually.

11. ACID RAIN PERMIT

This facility is not subject to any acid rain permitting requirements.

12. AIRS DATABASE

AIRS INSTRUCTIONS:

AIRS/AFS FACILITY-WIDE CLASSIFICATION DATA ENTRY FORM

AIR PROGRAM / POLLUTANT	SIP	PSD	NSPS (Part 60)	NESHAP (Part 61)	MACT (Part 63)	TITLE V	AREA CLASSIFICATION A – Attainment U – Unclassifiable N – Nonattainment
SO_2	B						U
NOx	B						U
CO	B						U
PM_{10}	B						U
PT (Particulate)	B						U
VOC	A	A[1]				A	U
THAP (Total HAPs)					SM	SM	
			APPLICABLE SUBPART				

[1] The facility has potential emissions greater than 250 T/yr for VOCs, but is not subject to any BACT requirements at this time.

AIRS/AFS CLASSIFICATION CODES:

A = Actual or potential emissions of a pollutant are above the applicable major source threshold. For NESHAP only, class "A" is applied to each pollutant which is below the 10 ton-per-year (T/yr) threshold, but which contributes to a plant total in excess of 25 T/yr of all NESHAP pollutants.

SM = Potential emissions fall below applicable major source thresholds **if and only if** the source complies with federally enforceable regulations or limitations.

B = Actual and potential emissions below all applicable major source thresholds.

C = Class is unknown.

ND = Major source thresholds are not defined (e.g., radionuclides).

13. REGISTRATION FEES

The permittee has submitted registration fees for this facility in accordance with IDAPA 58.01.01.525 for 1994 through and including 2001. The facility is in compliance with the requirements of IDAPA 58.01.01.525 – Registration And Registration Fees.

14. RECOMMENDATION

Based on the Tier I application and review of the federal regulations and state rules, staff recommends that the Department issue the proposed Tier I operating permit to Sinclair for their facility located near Burley, Idaho.

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cc: Bill Allred, Twin Falls Regional Office
AQ Program Office
Sherry Davis, Technical Services
Laurie Kral, EPA Region 10

IDEQ Title V Operating Permit Review Checklist

Please Mail To: Laurie Kral, EPA Region 10, 1200 Sixth Ave., OAQ-107, Seattle, WA 98101

1/10/01

CHECK ONE:

	Pre-Draft Permit
	Draft Permit
	Pre-Proposed Permit
X	Proposed Permit

PERMIT WRITER INFORMATION:

Permit Writer:	Darrin Mehr/Bill Rogers
Telephone No.:	(208) 373-0536
E-mail Address:	dmehr@deq.state.id.us

SOURCE INFORMATION:

Source Name:	Sinclair Oil Corporation, Burley Terminal
Permit Number:	031-00026

PUBLIC COMMENT (PROPOSED PERMITS ONLY):	**YES**	**NO**
Did this permit receive public comments? (attach comments and response)	X	
Were any of the comments substantive? If yes, describe or "flag" the comment.	X	

PROGRAM IMPLEMENTATION:

Does this permit contain requirements for:	**YES**	**NO**
Compliance Assurance Monitoring (CAM)? [40 CFR Part 64]		X
Acid Rain Program? [40 CFR Part 75]		X
PSD? [40 CFR Part 52.21]		X
Section 129 of the CAA? Standard condition for open burning	X	
NESHAP/MACT? If yes, list. Subpart R if major for HAPs **[40 CFR Part 61 or 63]**	X	
NSPS? If yes, list Subpart XX and Kb if applicable **[40 CFR Part 60]**	X	
Asbestos? Standard condition for renovation/demolition **[40 CFR Part 61, Subpart M]**	X	
112 (r)? Standard condition for regulated substances, not currently subject **[40 CFR Part 68]**	X	
CFCs? Standard condition for Recycling/Emissions Reductions **[40 CFR Part 82, Subpart F]**	X	
PTE Limits? (to avoid PSD, MACT, etc.) to avoid MACT	X	

Is the source in a nonattainment area? If yes, for what pollutant(s)? No

COMPLIANCE STATUS:

Is the source in compliance with all requirements? Yes

If not, what are the compliance issues?

PERMITTING AUTHORITY ISSUES/EPA REVIEW:

1. **If you want EPA to review this permit, which part do you want reviewed and why?**

2. **Are there other issues you would like to call to EPA's attention?**
   (Use additional paper if needed or call the EPA permit contact.)